



Gary Sparrow Endowed Faculty Fellow FY24 Annual Report

The Gary Sparrow Endowed Faculty Fellowship is a new position; all funds went into the corpus to allow the fund to grow. Therefore, no funds were available for use this year.

The plan for the next year is to use funds to support the creation of a new elective course that utilizes the distributed control system (DCS) DeltaV. DeltaV is commonly used in industry for process automation; many chemical engineering students are hired by companies that use DeltaV or a similar DCS. All chemical engineering students operate equipment using DeltaV in their process control course and both courses in the senior capstone lab sequence. In the new course, students will learn about the overall structure of the hardware/software. They will look at the process of setting up a system, from reading/creating Process and Instrumentation Diagrams (P&IDs) to making function blocks, alarms, integrators, sequential function charts, pulling it all together in an operator graphic (human-machine interface), and tracking how a system is running. Courses like this are valuable because they help bridge the gap between academics and industry. The new course might require additional updates/support to our control room and potentially faculty/staff professional development for more in-depth training with either Emerson (the company that makes DeltaV) or Novaspect (the company we work with for DeltaV updates and support).